

CLAIMS

1. A device (1) for treating compressed air, intended to be installed in an industrial vehicle, comprising a motor vehicle able to haul a trailer, including:
- an air inlet (3) for air coming from a compressed-air source (7);
  - at least one air outlet (4) connected to a reservoir intended to supply the service brake system;
  - a set of electropneumatic components (37) distributing compressed air from the compressed-air source bound for the reservoir or reservoirs;
  - an electronic command and control unit (10), able to operate said set of electropneumatic components (37), the command and control unit being connected to a computer communication bus (30) and to various electrical components such as sensors or contact switches,
- characterized in that it also comprises:
- a supplementary air outlet (26) directly supplying the actuator or actuators of the brake system;
  - a supplementary set of electropneumatic components (27) which are associated with the supplementary air outlet (26);
  - operating means incorporated into the electronic command and control unit (10), able to operate the supplementary set of electropneumatic components (27) on the basis of information originating from the computer communication bus (30) and/or from various electrical components.
2. The device as claimed in claim 1, characterized in that the supplementary air outlet and the set of associated electropneumatic components, are

arranged in an element (16) attached to the body (2) of the device.

3. The device as claimed in claim 1, characterized in  
5 that it also comprises:
  - at least one supplementary air outlet intended to supply the actuator or actuators of the pneumatic suspension system of one axle;
  - an additional set of electropneumatic members,  
10 which is associated with the supplementary air outlet or outlets;
  - operating means incorporated into the electronic command and control unit and able to operate the additional set of electropneumatic members on  
15 the basis of information originating from the computer communication bus and/or various electrical components.
4. The device as claimed in claim 3, characterized in  
20 that the supplementary air outlet or outlets intended to supply the pneumatic suspension system, and the set of associated electropneumatic members, are gathered together into one or more  
25 elements (13-16) attached to the body of the device.
5. The device as claimed in claim 4, characterized in  
30 that the air outlets intended for supplying the pneumatic suspension system which are attached to an axle are grouped together into one and the same  
element attached by flanges to the body of the device.
6. The device as claimed in claim 3, characterized in  
35 that the electronic command and control unit (10) is interfaced with one or several altitude sensors (34) measuring the difference in height between the chassis of the vehicle and one or several points of the axle concerned.

7. The device as claimed in claim 1, characterized in that it also comprises:
- at least one complementary air outlet intended to supply the pneumatic actuator or actuators of an auxiliary system such as, in particular, a differential lock system, a movement take-off system,
  - a complementary set of electropneumatic members which is associated with the complementary air outlet or air outlets,
  - operating means incorporated into the electronic command and control unit able to operate the complementary set of electropneumatic members on the basis of information originating in particular from the computer communication bus.
8. The device as claimed in claim 1, characterized in that it also comprises means for dehumidifying the air originating from the compressed-air source.
9. The device as claimed in claim 8, characterized in that the means for dehumidifying the air comprise a cartridge (5) that can be removed from the body (2) of the device.
10. The device as claimed in claim 2, characterized in that it also comprises one or several supplementary elements (17, 18) attached to the body (2) of the device, each element having one or several electrical contacts able to be incorporated into an electric control circuit, said contacts being operated by the command and control unit (10) on the basis of information from the computer communication bus and/or various electrical components.